252 Deer meat was usually cut into hunks with
262 an obsidian blade and boiled in a clay pot with
salt (tus), according to S.G. But the addition
[263] of salt in cooking was denied as aboriginal by
[412] M.L. and M.P., who agreed that in old times
salt was only eaten in tiny pinches, usually to
accompany vegetable foods, particularly greens.
However, all agreed that deer meat was more
often roasted than boiled, and that this was
done by men.

Ground squirrels and other rodents had the
tails broken off, were singed thoroughly on
coals, and then were roasted in a hole kept for
such purposes close under the fireplace.

Fish were sometimes boiled, but more often
were split ventrally and laid on coals which
had been pulled from the fire and covered with
a layer of sand and grass. In turn, coals were
laid atop the fish after they had been pro-
tected with another layer of grass and sand.

267 Fish from Lime Kiln Creek, Kaweah River
136 and its several sloughlike branchings, and Wood-
lake were abundant for Wukchumni and Gawia.
M.L. described thirteen kinds. The rainbow or
"lake" trout (e´pːs); minnows [?] (ta´kːč), a
little fish about 5 inches long; suckers
(po´dhoi); another tiny fish "which never grew
any larger" (ša´dhui); a black fish with a
short head, a large dorsal fin, and few bones
(tu´kmu); perch, a small flat fish (tapo´psu);
a trout "with a swallowtail" (čadu´du); a small
fish with lateral fins that "looked like pins"
(ču´khiu); a large oval fish about fifteen
inches long, with a large mouth and "one big
back bone" (ṭa´ṭu); a similar fish but smaller
(ko´po); a fish which resembled a catfish yet
lacked whiskers (ni'e´tːč); the "greaser" fish
which "has too many bones" (ta´wːs); and the
catfish (ča´dut). Eels were not seen in Wuk-
chumni territory nor did salmon reach the
Kaweah River, M.L. claimed; she added that few
of the old varieties of fish were available now.

252 Deer meat to be jerked was cut in lateral
262 strips from an initial cut down the backbone.
The back sinews were first removed as they were
the most valued. The meat was rubbed with rock
salt which was in strong solution or pulverized.
The strips of flesh were hung over tree
branches where they were not in too hot sun,
and turned daily until dry.

Fish were split ventrally and, unsalted,
were hung along a slender pole set up on
forked sticks in a river bottom. Fish were
hung by their gills only when being carried.

323 Yellowjackets' larvae (ka´wa) were a
[262] favorite accompaniment to manzanita berries.[187]
The entrance holes to the yellowjackets' nests
were watched at sundown; often three or four
were located near each other when the returning

[263 191] [187]The seeds added as flavoring to manzanita cider were also called ka´wa. Analogical naming, perhaps a form of nicknaming, was a favorite Yokuts trick; in this case we cannot be sure whether seeds or larvae are the original "kawa."

1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts N529
[P. 786] Wukchumni

Salt

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[439]

Modern "American" salt is called kuyu. In old times two kinds of salt were available. Rock salt (tus) was bought from the Monachi (Eastern Mono), who said it "came from a whole hill of salt that looked like snow." Before it was used this salt was heated on hot coals, which caused it to crumble. The other and more common salt (a´d:t) was derived from marsh grass, and was called in English "red salt" because "it looked red all over the grass."

Once M.L. and her stepmother, who was a Gawia, went over to Haditao for salt. The old women dug up the grass that grew there. She got some wood and made a fire. At sundown she put the grass on the fire which had burned down to coals. M.L. went to sleep but her stepmother stayed up until the grass was reduced to ashes. Then she lay down for a little while. She would not let the little girl look closely at the fire, nor would she herself eat anything. She worked all the next day piling up more grass. At sundown she ate a little bit but would not drink, explaining that if she ate much or drank water there would be nothing in the fire when she finished. When the ashes were brushed away there were lumps of salt in the bottom of the fire. The old woman lifted these out and freed them from the ashes by shaking them in an open-twined basket.

In 1925 M.L. had some grass-salt which she prized. It was greyish pink in color, had the texture of coarse sugar and the taste of mild vinegar.

Kroeber makes a somewhat different statement about grass-salt.[191]

The Yaudanchi,...with other southern tribes, gathered a salty grass known as alit and beat it on stones to extract the juice; which was particularly favored with green clover.

This was a grass growing in alkaline ground which was abundant in the tular.

Woman's Household Equipment

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A Wukchumni woman's housekeeping equipment comprised one or more digging sticks, a soaproot brush, hot-rock lifters, and a "set" of baskets. The digging stick (ča´poi, lit., mountain ash) was made of manzanita, if obtainable, or of young white oak. The length varied according to the owner's preference. The tip was charred and rubbed down on rough stone which gave a heat-hardened point; the point was reworked by the same method when it became too blunt. Sometimes a woman who liked a short stick (about four feet long) would contrive a

[191] Handbook, 530.

343 small trinkets stored in baskets. Women kept
251 extra baskets, the burden and fish baskets there, and food which was stored for immanent use.

The acorn storage bin (su'u'na) was made of twined mats of aiač tied around a stout cylindrical framework. The upper ends of the mat wefts were left untwined and, after the bin was filled, these loose tops were bunched up and tied tightly. Acorns were removed from a hand hole near the bottom which was plugged up with willow bark (or any convenient material). The bin was set up on a special platform supported by four posts or in the branches of a tree, to which it was lashed with ho'.[7]

343 Sweat house (mos).---This was the usual
515 two-post structure described for the Central Foothill region. A new one was not built until the old one burned or was beyond repair. The fire was just inside the door; so was the firewood, in two piles, one on each side of the door. Whoever was sitting nearest the wood kept up the fire.

Any male "old enough to stand it" was welcome to make use of the sweat house. There was no ceremonial dancing within it, but
[533 doctors or others who knew how would occasion-
524] ally dance there (perhaps for practice, as we know from the Wukchumni). The flute was often played there, but games were not indulged in.

SUBSISTENCE AND CLOTHING

262 Foods.---Foods available and used were those customary with other foothill Yokuts and were procurable in abundance. Rock salt was
[263] known -- probably traded from the Monachi -- but more often the salty deposit on certain grasses was flicked off on a small willow twig. Greens and bulbs, tule and iris roots were the vegetable foods besides the staple acorn. Buckeye seed was used after a thorough leaching only when acorns were scarce.

252 In discussing the preparation of acorns,
262 Mayfield says that "a sort of sieve or colander, made of fine willow shoots," was used to separate the coarse and fine particles. (This does not necessarily preclude the usual Yokuts circular winnowing tray.) The preparing and cooking of acorn foods are as reported generally for the Yokuts. The soaproot brush with
[H12] straight bristles was used for brushing up acorn flour at mortar holes.

Piñon nuts were collected and prepared as by the Waksachi (see below), eaten roasted or mashed in a rich mush.

262 Ground squirrels were smoked from their
224 burrows, but the fan used was a basket or
184 piece of hide, i.e., evidently not a feather fire fan.

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[7] Mayfield describes a similar granary (ibid., 23).

252 2-1/2 inches thick. On one side was the cooking depression, about 3 inches in diameter. It was customary to bake these cakes and distribute them to children before the mush-cooking was undertaken.

[855]

251 Uncooked mush could be kept for some time, then cooked as needed. (Thrall saw a basketful on a porch at Picayune which "looked like dried putty." A similar basketful seen by Gayton looked like a mixture for an old-fashioned linseed poultice.)

263 Mush was often flavored by adding pulverized seeds of various kinds.

Seeds.---Seeds were parched on circular
252 trays by adding hot coals and shaking the whole lot vigorously. To separate the coals, the seeds were then sifted through an openwork
[285 415] basket (xale). This, said N.W., was the same shape as the basket on which the roasting was done. The seeds were then taken to a mortar rock and pounded in a deep hole. An oil which exuded caused the seed flour to ball. The food was eaten in these balls; it kept a long time. These seeds were got in the valley.

Tarweed [seeds or leaves?] was pulverized and eaten dry that way, or added to manzanita
[263] cider for flavoring. Never was it used to flavor acorn mush. When eaten dry it tended to blow about, causing one to choke. (All present laughed at the informant's description of this.) The tarweed preferred bloomed in July; it "smelled good and was good food." Emma Pumpkin gathered a sackful this summer (1938).

Wild oats grew abundantly in the Coarse
222 Gold region, said J.R. The women gather these
252 seeds in seedbeaters, throwing the grain over their shoulders into burden baskets hung on their backs. Old women worked every day at this; it took about one day to fill the burden basket. The seeds were laid out on rocks to dry; when the husks were ready to drop off they were winnowed. To prepare these seeds for
252 eating, they were roasted on a basket with hot coals, the coals later being sifted out by means of another basket. The parched seeds were then pounded in a bedrock mortar into a flour somewhat finer than cornmeal. The flour was mixed with water, then shaped as small thin biscuits. These were cooked in hot ashes, closely watched to prevent burning. Such cakes were eaten cold or hot, or laid away for the next meal. They were a favorite accompaniment to manzanita cider.

222 A "grass" grows down toward the valley which "blooms red on the end" and produces fine black seeds. These are ripe in late summer (July-August).[88] The plants were pulled up, roots and all, and laid out to dry. The seeds dropped off; those that failed to were stripped
[251] off and the grass thrown away. The seeds were brought home, stored in the storehouse.

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[88] Probably the "kasin" seeds prized by other Yokuts, though this date is a little late for their ripening.

½ [i.e. ½ of acorn meal dough. - Analyst]

three days. Fish was treated the same way. Any kind of meat could be dried, said J.R., and would keep for two or three months.

Grasshoppers, a wingless type, were got in the plain of the valley. They were caught by setting a fire in a circle, driving it inward. When the grass was burned over, the grasshoppers, killed but not cooked, were collected. Taken home, they were roasted on a tray with live coals.

Angleworms were got in winter and cooked in a soapstone dish. A little water was added, "just enough to make a little gravy." Some people dried angleworms to keep for later use, a practice which J.R. and P.R. both decried.

Grubs of a small black butterfly[92] were also cooked in a soapstone dish with a little hot water; they were not cooked long. These were usually dried on trays in the sun and stored in sacks for later use.

Yellowjacket grubs were dug from the ground after the live insects had been smoked out. Dried weeds were stuffed in their holes, lighted, and blown upon. The holes were about two inches across, the nests some twelve inches below the surface. A number of holes indicated many nests. The grubs were cooked in ashes, then sifted from the ashes in an open-twined basket.

Salt.--Salt was not always available to the Chukchansi. Their supply came from the Paiute (probably Eastern Mono) of Nevada who came over about once a year to trade and even then did not always bring it. J.R. did not know where they obtained it. The salt was paid for either by bead money or by baskets. If the payment was a basket, this receptacle would be slightly larger than the lump of salt for which it was exchanged. The basket, however, was thought to be the more valuable because of its durability: "it holds water, lasts a long time; it may look old but it will still hold water a long time." For a piece of salt say four by six inches, not many beads were paid; roughly, it would be about 50 cents in American money.

The salt so obtained was mixed with water, "just enough to stick it together," and put on ashes to heat, left overnight. When taken out it was hard, "just like some kind of rock." When struck, it broke in little pieces. The flavor, however, was changed by the treatment: "it was kind of weak, you know, not like it was before the burning."

According to N.W., rock salt was got from the Eastern Mono who lived "the other side of Tuolumne, down Mono Lake way." They brought it from "the other side of Seventy-Seven, Basalt Meadow." They brought crystals about one-half

[92] These are grubs of a small black butterfly which does not come every year; there were none this year (1938) but they were plentiful in 1936. They come very early in the spring on trees where new leaves are budding. [Possibly a moth? -- A.H.G.]

1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts N529 .

263 439 to three-quarters of an inch in diameter, carrying them in burden baskets. The salt was paid for in baskets or shell money. A quantity 263 of salt about as large as a pine cone would be 435 worth 50 cents in American money, in native terms, a basket about the same size (as a pine [804] cone) or a kelan of beads (a strand the circumference of the flat hand). The Mono came over several times a year.

263 Rock salt was ground to varying degrees of fineness and eaten with meat, nuts, or seeds, but not with acorns. Rock salt to be eaten with acorns was "burned black" first. A layer of salt was covered with hot ashes, then pounded in an acorn hole and mixed with a certain "grass" that grows in or at the edges of the river. The grass and salt were mashed together then formed into balls about six inches thick. Water was added if needed to make it stick together. The grass was wrapped around the balls, making a thick covering. Several such balls were put in a hole filled with very hot ashes and left all night. In the morning the balls, from which the grass wrapping had burned, were dug out and brushed hard with a soaproot brush. A ball might be struck a blow and the pieces given to various people. Three to five balls would be made at a time, which would last an average family a whole year. [Just how this type of salt was used with acorns was not stated. -- A.H.G.]

258 263 The salt called 'alit' was derived from salt grass which is covered with a white incrustation when growing. It was gathered by hand, spread to dry on flat rocks, then pounded in a mortar hole. Then it was winnowed from a circular winnowing tray, the grass particles wafting out and the salt grains remaining. The salt was dampened and pressed into balls, but these were not baked. The balls were broken as needed for use. This salt was eaten with clover and sour berries; if it was unobtainable, then rock salt was used.

The Chukchansi "went to the plains to scrape a sort of alkali off the ground," says Kroeber.[93]

Beverages

272 [423] 222 When manzanita berries are nearly ripe, women specify certain bushes as theirs, said J.R., and no one else can take the berries from them.[94] When the berries were thoroughly ripe, the ground under a bush was raked clean of all leaves and twigs, until the ground was bare. The woman took a long pole and, standing close to the bush, knocked all the berries to the ground. Then she took a flat short stick to

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[93] Handbook, 530.

[94] It is not clear whether a woman claimed the same bushes each year or specified them anew according to the crop promised by various bushes. -- A.H.G.

1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts NS29
[P. 222 a] Western Mono NS 25

Fishing

Y W 226 Fish were scarce in the upper streams in Waksachi territory, said B.O.[162] They were captured by poisoning; no spear or harpoon was used (B.O. and S.O.). (Perhaps because of the smallness of the streams in their vicinity.) A plant called ya´ohao (not soaproot, but unidentified) was mashed and scattered over the water. The fish became active, jumping around in the water, then became stupefied, when they were scooped up in fish baskets. Men prepared the poison, merely by mashing the plant leaves, but both sexes took part in capturing the fish.

Foods

● Y W ● 263 258 Salt.---Salt was obtained from "a bush that looked like a tomato vine." While living at Čoloku (on Fisher's Ranch), S.O.'s father-in-law and his mother's sister used to gather it. To obtain the salt a pit was dug about 2 feet long, 1 foot wide, and 1 foot deep. In this a fire was built and let burn down to coals. A grating was made by laying hardwood sticks across the earth's surface and on this the plants were laid. The whole thing was fanned with a fire fan. A material then oozed out of the plants and dropped on the coals forming large lumps. Then the whole thing was covered with earth and left overnight. In the morning the pit was opened and the salt, which was now a hard large mass, was cleaned of dirt. These lumps were trimmed and sold. This salt was eaten in tiny bits with meat; it was never put directly on food or cooked with it. The plant (or grass ?) which produced this salt was called in Michahai, ti´k:t koi´yo (smells salt), in Wukchumni, a´l:t, and in Waksachi, u´nabi. It was sometimes boiled and the liquid drunk to cure nausea. Salt or brackish springs were all called tuša´o.

Y W [264] [439]

Rock salt (koiyo, Michahai) was obtained in trade from the Eastern Mono.

Y W 272 263 Manzanita cider.---Manzanita berries were gathered, mashed on a tray with a small pestle, and put into a sieve above a large clean mush basket. Water, poured over the mass, seeped through into the larger basket. A powdered plant called ča´m:t (Michahai; pasida, Spanish; unidentified) was added as a thickener and flavorer. There were four or five such flavorers known, but S.O. could not name them. The manzanita drink thickened as it stood, and people came to drink it at whatever stage they preferred. It began to sour after twenty-four to forty-eight hours and was no longer thought fit to drink. S.O. insisted that it was in no sense intoxicating.

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[162] Trout should be abundant; possibly he meant scarce in comparison with the numerous varieties of the lower foothill rivers and sloughs.

[P. 223 a] Western Mono NS25

W Y 251 262 nut was held butt down on a small flat stone and struck on the tip with another stone. A man would not hesitate to use his arrowstraightener for such a purpose, though other comfortable hand-shaped stones were kept about and so used. The shelled acorns were spread out on rocks to dry, then stored in large covered baskets in the house. Acorns to be stored in outdoor bins were not shelled. Acorn-shelling was a favorite evening occupation while some old person would tell stories.

W Y [251]

Acorn mush.--The process of cooking was the usual one with hot stones. The stones were of a dull brownish color, hard and fine grained; granite was never used. The mush basket was always twined and invariably carried four horizontal rows of redbud ornamentation (pl. 2, b herein). The hot stones were lifted from the fire with two pine poles, dipped quickly into water to rinse (if ashes adhered, which they rarely did), and dropped into the mush. They were extracted from the mush with a looped mushstirrer made of grapevine.

Y W [285]

If people were in some hurry to eat, the whole basket of boiling mush was set into a larger one filled with cold water. If they were in a great hurry, portions of mush were scooped up in individual baskets or clay bowls and lowered into cold water where they immediately solidified. These agglutinated cakes were removed from the water and served from a big tray. They were eaten "just that way."

Y W [263]

A plant called paša was used to flavor acorn much.

Ya''ap.--This was a root (unidentified) about 1 to 2 inches long and 2 or 3 inches wide. It was boiled, or baked in ashes, and was sweet, mealy, and fragrant.

Yellowjacket nest.--This was dug up, roasted on a hardwood grating laid over coals, cooled, broken up, and eaten.

W Y [237]

Honey.--A bee (?) called in English "big stick bee" (ta´beko'ot, Waksachi) deposited honey all over a tree -- in its crevices, forks, or splits in the bark. This honey, while sticky, was sufficiently firm to be cut away in small pieces. An obsidian blade was used, and pieces obtained might be as large as a man's middle finger. The honey was taken back to camp on leaves, or in a leaf-lined basket, and was eaten immediately "just like candy." B.O. insisted that this was "old time" and that the bees did not come from Spanish sources.

Fish.--These were usually roasted between two layers of hot coals; the bottom layer was covered with sand. Occasionally they were boiled in a pot, but were less favored when so cooked.

Shellfish.--The only type known for eating was the freshwater oyster (river mussel). When whole, with meat inside, it was called ki´puš; the shell itself, which was burned to combine with tobacco, was known as ke´wi. As a food the oysters were used only by the people near Wood-

2: Kroeber E-5 (ca. 1918) 1953
NS29 Yokuts NS29

226 surface. The *t'unoi* net was fastened to a circular frame on a pole, held vertically, and raised. The more usual Californian net of this type is on a half hoop, and is used rather for scooping or horizontal lifting.

263 Salt may have been obtained at springs, but the reported cases are from the Pitkachi, whose "salt" stank; from the Chukchansi, who went to the plains to scrape a sort of alkali off the ground; and from the Yaudanchi, who, with other southern tribes, gathered a salty grass known as *alit* and beat it on stones to extract the juice; which was particularly favored with green clover.

THE BOW.

411 Common bows for small game were little more than a shaped stick; good bows were carefully smoothed of large mountain cedar wood and sinew backed. The commonest type, primarily for the hunt, was nearly as long as a man, of about two fingers' width and the thickness of one. The ends were recurved, probably through a curling back of the thickened sinew. Bows made specifically for fighting were shorter, broader, and flatter, and pinched in the middle. Except for being unpainted and probably not quite so extreme in form, this type appears to have been the same as the northern California one.

Mention of the right and left end of the bow makes it seem to have been held horizontally, or at least diagonally, as by most California tribes.

The arrow, *shibid* generically, had three forms among the Yaudanchi, known as *t'uyosh*, *djibaku*, and *wuk'ud*. The war arrow had no foreshaft, but a rather long wooden point, notched. It measured from the finger tip nearly to the opposite shoulder or a trifle more than the possible pull of the bow. The Mohave also fought with arrows lacking flint tips. The ordinary hunting arrow had a long sharpened foreshaft, but no real head. The deer arrow had foreshaft and flint head, but the foreshaft was socketed without glue or tie, so that the main shaft would disengage after hitting.

413 The prevailing arrow straightener among the Yokuts is the southern California form: a well-shaped rectangular block of soft stone, often rounded or ridged on top, and invariably with a polished transverse groove. (Pl. 49, *a*.) This implement is undoubtedly associated with the employment of cane for arrows: the Yokuts are known to have used this plant, though not exclusively. The joints were warmed in the groove and bent by hand or on the ridge after the stone had been heated; the groove was also used for smoothing. The holed straightener of wood or horn for wooden shafts, as employed all over northern California, has not been reported from the Yokuts.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

Acorn soup was dipped from the basket with the first three fingers and placed in the mouth. Both it and the cake were very nourishing, being rich in oil and starch. A small piece the size of a base-ball is said to contain food value equal to more than an entire loaf of our bread.

To the uninitiated, acorn bread is a tremendous disappointment. To me it tasts flat and chalky, but white persons who persist are said to learn to like it.

SALT FROM SALT GRASS

There being no natural deposit of mineral salt accessible to the Yokuts Indians of the San Joaquin Valley, the obtaining of this important article of diet was a serious problem. Along the east side of the San Joaquin Valley it is quite likely that a portion of the salt used was mineral salt obtained from mountain Indians who had in turn obtained it by trade from the inhabitants of the desert region east of the Sierra, where natural deposits of this mineral were common. We are assured by old Indians that salt obtained in this way was very expensive. Many beads of shell or steatite were demanded for a few handfuls of the crude salt offered.

A large portion of the salt used by the Yokuts tribes in the San Joaquin Valley is still obtained from salt grass. Although the method of obtaining this salt has been observed by white settlers since as long ago as 1850, it is remarkable that there have been available through libraries and newspaper files no detailed accounts of the method of harvesting and refining it.

All salt grass does not bear enough salt to make it useful as a source of that material. Most persons who have walked through some fields of salt grass in the early morning have found it covered with what appeared to be heavy dew, have later had the experience of finding their shoes covered with a heavy incrustation. This is the salt used by the Yokuts.

The salt is exuded from the leaves of the salt grass and adheres to them in small globules smaller than a mustard seed. In the early morning this excretion exists as a small drop of liquid. By noon of a warm day it has become solid and by mid-afternoon is dry and hard and can be removed from the leaves of the grass by threshing.

As the grass itself is not desirable, the problem exists of removing the salt without breaking up the brittle leaves and

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

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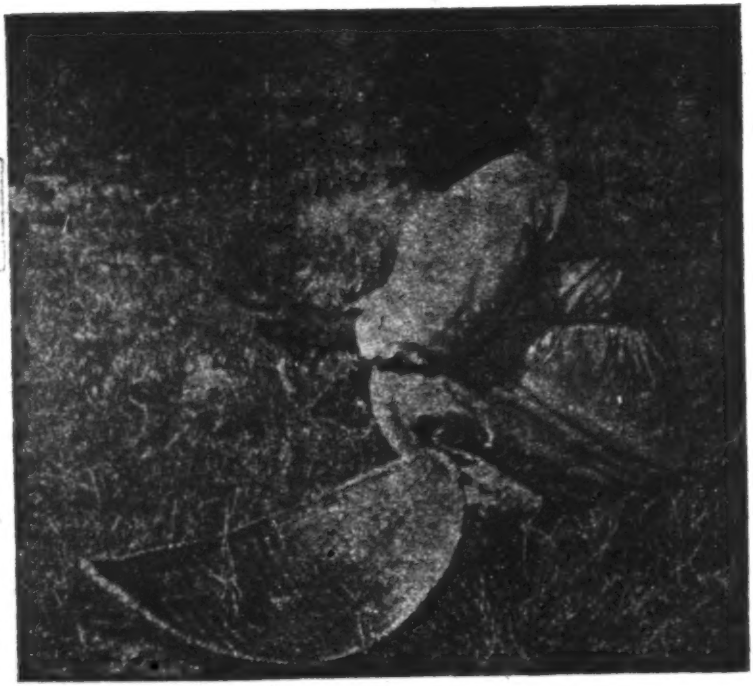

Wahnomkot, full-blood **Wukchumne** Yokuts from the Kaweah River east of Visalia. She is working in the old salt grass field near Guernsey, Kings County, where the Yokuts tribes have harvested salt from salt grass from time immemorial. On the ground is **tah'-meuk**, generally made of cottonwood twigs and put to innumerable uses. This is a good illustration of features, posture, and the way the salt grass is pulled. The fingers of her right hand are bandaged in order to prevent the grass from cutting them.

mixing them with the refined product. The method by which this is done is extremely interesting, and has several times been witnessed and photographed by the writer.

The most desirable location in the vicinity of Tulare Lake was an area about four miles northeast of Guernsey. This area has been utilized as a harvest field for salt grass for at least one hundred and fifty years, and probably much longer.

Harvesting is done during the later part of July, or the first of August. At about ten or eleven o'clock the globules of salt are partly dried, too dry to be smeared in picking, and too

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

moist to be brushed from the leaves. So the Yokuts harvest crew enters the field. The workers kneel and break the grass off close to the ground, placing it in shallow wicker baskets. They then very carefully stack it with the stems resting on the ground and the leaves upward. This whole process must be very carefully executed, otherwise the salt will be dislodged from the leaves and wasted upon the ground.

By two o'clock in the afternoon the salt globules are very dry and easily dislodged, so the pulling of the grass is discontinued and the Indians begin threshing. During the preceding four or five hours, while the grass has been stacked with the leaves uppermost, the salt has completely dried and hardened, but the leaves of the grass are still tough, although somewhat wilted.

It is important that the threshing or flailing of the grass be done at this precise stage, because if delayed longer the grass itself becomes brittle and is pulverizd and mixed with the salt. If threshed too soon the salt is not dry and is not easily removed from the leaves of the grass. It is because the grass is stacked with the stems down and the salt exposed to the sun that the salt dries faster than the grass itself, which remains tough for the threshing.

Small quantities of the salt grass are now thrown upon a deer or elk skin, which is spread upon the ground. Three or four Indians seat themselves about this pile of grass and begin flailing it lightly, using small willow poles from which the bark has been stripped. Care is taken not to pound the grass heavily, but merely to tap it so that the salt is dislodged from the leaves and sifts through the grass to the deer skin below.

When it is seen that the salt has all been removed, the grass is gathered loosely in the hands, is shaken thoroughly, and discarded. This process is repeated until a layer of salt approximately one inch in thickness is deposited upon the deer skin. This salt is then placed in a basket and the process repeated, until several hundred pounds have been obtained. The Indians move very slowly, but methodically and a family of four Indians will gather during the harvest season approximately six fifty pound flour sacks full of this crude material. By sifting and winnowing, after the crude material has been taken to the rancheria, approximately four fifty pound flour sacks full of salt will be obtained. The Wukchumne Yokuts call this salt *ah'-dit*. Other Yokuts tribes call it *ahlit* or *ahlet*.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

263 The salt obtained from salt grass does not taste like common table salt. It has a sour, salty taste much like that of a dill pickle. Although it is not acceptable to the untrained palate, surviving Yokuts Indians still use it for seasoning, almost to the exclusion of all other salt.

263 264 The salt is not all placed in cooked material. Some of it is eaten separately. A little of it is kept in a small basket or clay receptacle and occasionally a small pinch is placed in the side of the mouth. This may be done while the meal is being eaten or while housework is being carried on. Some of the salt is mixed with water and cooked. After it is reduced to a thick consistency it is formed into small cakes. As needed, small pieces of this solid salt are placed in the side of the mouth and dissolved like an all-day sucker. The Tachi wet the dry salt and form it into lumps about the size of a golf ball. The children run about the camp licking these lumps.

RIVER JUNGLE GROWTH

137 Persons who have not lived along the San Joaquin Valley rivers prior to the time when they were cleared for farming and in running cattle and sheep upon their bottom land, will scarcely believe the stories told by pioneers about the wild plant growth along those streams. As late as 1900 some of this growth still existed along the Merced River and along the nearby San Joaquin, but only enough to suggest something of its previous rank nature. This jungle consisted not only of trees, but of wild grapes, several varieties of tule and willow, wild blackberries, nettles, grasses, and many other plants too numerous to mention.

It was not until the fall of 1925 that the writer became familiar with the last remaining jungle along the Kaweah river, which he was assured had been almost destroyed at that time, but which was even then beyond the belief of many persons who had lived for years within a few miles of it.

During the spring of 1931, while searching for material to be used in constructing two California Spanish-type oxcarts, I made an exploration of the remaining jungle between Lemon Cove and Visalia. A dense portion of this area lay approximately six miles east of Visalia and near East Mineral King Highway. This territory had been burned over the previous fall and did not present one-third of the growth which had existed the year before.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

the house. You generally lived by your grandmother or by your good friends. 159 342

The tule house had a row of posts down the middle. They had forks at the tops. On top of the posts we put long poles. Then we leaned poles against the long poles at the sides. On top we put long tule mats. We made the mats nice and smooth. The tules ran up and down. We tied them together with tules. We could roll them up like a rug. They kept the water out good. 592

Inside the Che we kept everything—acorns, dried *sah'-pahl* (jack rabbit) and *i-ke' em* (elk) and *suey'-yohl* (antelope) and *lo-pits* (fish). We hung all of these on the poles. 159 251 262

We dried lots of *mah-mil* (blackberries) and *saw-ha'-mik* (mushrooms) too, and put them in baskets. We had lots of seeds in baskets. The house was full of things to eat. We always had plenty.

The Chunut and Wowol cooked the white-shelled lake clams in large bunches like you call a clam-bake. They called the clam *trah'-sheep* and the clam-bake *hah-pots'-ahk*. First they put on the ground a layer of tules four or five inches thick. Then they put the clams on top, with the open edges down as thick as they could, so they would not roll over. They piled tules on top of the clams. Then they set fire to them. When the tules burned, the water ran out of the clams and steamed them so they cooked nice. My people ate lots of them that way. They were good with salt from salt grass. Sometimes they baked lots of fires of them. 159 252 262

We gathered lots of salt from salt grass. Lots of Indians used to get their salt at a place about three miles north of Guernsey. I have gathered salt there lots of times. The salt comes on the leaves of the grass in little round pieces. We gathered the grass in the afternoon when it was damp and stacked it in big piles. After dinner we put the grass on an elk skin and hit it with sticks. The dry salt fell off and we threw the grass away. It made a good salt. We called it *ahlet* (ah'-leet). 159 222 263

We made another salt by burning a different salt weed. We called it *tiit* (tih'-it). It was not as good as ahlet.

The old-time Chunut Indians did not use much acorn mush. They used more tule roots. They did not have to take the bitter out of the tule roots. They ate some of the tender roots raw and pounded up the old roots. 159 252 262

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

old-time Indians catching elk with a rope like a reata fastened to an oak tree. They bent a limb down to hold the rope. I never saw that, but I am sure they did it.

Once, while we were at Chawlowin, we caught *sah'-pahl* [jack rabbits]. We called the drive *How'-sik Ho-ah'-mah.* There were only about fifty of us to help, but we caught about three hundred rabbits. I helped with two or three other drives near Armona, too. We went to the land east of Chawlowin to catch the rabbits. Most of us just waded across. The water was just up to our waist at the deepest place.

There were thousands of jack rabbits in the brush around the lake. We could see at least three hundred in the open places at one time. We drove them toward the net and made a close line to hold them. Everybody had a stick to throw at the rabbits. We called it *wah-traw'-he.* It was not crooked. It was almost straight. We killed lots of the rabbits with the sticks before they got to the net. When we threw the stick it whirled around and broke their legs if they were running. It was easy to kill jack rabbits with wahtrawhe if you got close to them. Sometimes they would sit quiet until you were right close. If you looked close you would see them and hit them before they jumped up.

When the rabbits got close to the net two or three men ran in with their clubs and killed them. The rest of us stood close together and kept them from running away.

The rabbits were skinned and the meat dried. We did this on the land east of the lake before we went back to Chawlowin. Dried rabbit meat was good with salt from salt grass on it. The skins we cut up to make blankets and capes.

There were lots of fish in Tulare Lake. The one we liked best was *a'-pis,* a big lake trout. They were real big fish, as big as any salmon, and good meat. There was another called *took'-mun.* I think the white people called it chub. It was not a very good fish.

One of the lake fish was *pahl-hoo'-ish.* It was the one you call sucker. Sometimes the steel-heads came in the lake too; so did the salmon. We called the steel heads *tah-wah'-aht* and the salmon *ki'-uh-khot.* We dried lots of fish. When it was dried and smoked, the salmon was the best. We ate salt grass salt with the dried fish. That made it good.

Another great big fish used to come in the lake sometimes. I remember that we caught one at Heuumne when the water was